

CLAIMS

1 - Process for the manufacture of pentafluoroethane, according to which tetrafluoroethylene is subjected to reaction with an organic nitrogenous base hydrofluoride at a temperature of greater than 100°C and not exceeding 160°C.

5 2 - Process according to Claim 1, in which the temperature is from 110 to 150°C.

3 - Process according to Claim 2, in which the temperature is from 120 to 140°C.

10 4 - Process according to any one of Claims 1 to 3, in which the pressure is maintained from 2 to 30 bar.

5 - Process according to any one of Claims 1 to 4, in which the organic nitrogenous base hydrofluoride corresponds to the general formula $[B \cdot nHF]$ in which B denotes the organic nitrogenous base and n denotes a whole or decimal number of less than or equal to 4.

15 6 - Process according to Claim 5, in which n denotes a number of less than or equal to 3.

7 - Process according to Claim 5 or 6, in which n denotes a number of greater than or equal to 2.

20 8 - Process according to any one of Claims 1 to 7, in which the organic nitrogenous base is chosen from triethylamine and tri(n-butyl)amine.

9 - Process according to Claim 8, in which the organic nitrogenous base is triethylamine.

10 - Process according to any one of Claims 1 to 9, in which the reaction is carried out continuously.